ESO - 785

FOOD PRICE INFLATION - 1981

Lois Hungate and Wallace Barr

Agricultural Economists
The Ohio State University

Consumers are well aware of rising food costs. Their greater awareness of food price increases than for other goods is largely due to the frequency of food purchases. We use the question and answer format to examine some of the reasons why food prices have increased.

1. HOW MUCH HAVE FOOD PRICES INCREASED IN THE PAST FOUR YEARS?

In 1977, food prices increased a little over 6 percent (See Figure 1). In 1978 food prices increased 10.0 percent, in 1979 they increased 10.9 percent and in 1980 food prices increased approximately 8.7 percent.

In 1980, the farm value of the market basket of domestically produced foods accounted for about 20 percent of the increase in grocery store prices. The farm to retail price spread, a measure of processing and marketing costs, accounted for about 75 percent of the rising food prices in 1980. Prices for fish and imported foods accounted for the remaining 5 percent of the food price increase in 1980. Food purchased away from home in 1980 on the average increased 10 percent relative to 1979.

For 1981, it is expected that increased farm prices will account for around 40 percent of the food price increases, the processing and distribution sector for about 55 percent and fish and imported food price increases for the remaining 5 percent.

2. HOW MUCH HAVE PRICES OF SPECIFIC FOOD ITEMS INCREASED IN 1980?

Figure 2 shows specific food item cost increases as well as the great

variability in food price increases between food categories in 1980. All food items increased 8.7 percent. But, cereal and bakery products increased 11.9 percent whereas beef and veal increased only 6.4 percent, while pork actually declined 2.6 percent and eggs went down 3.1 percent. Poultry products increased 4.1 percent, and dairy products went up 10.1 percent. Fruits and vegetables increased 7.0 percent, and sugar and sweets increased 22.4 percent. Most food prices increased less than the general inflation rate of 12.3 percent.

3. WHY WAS THERE SUCH A LARGE INCREASE IN THE PRICE OF SUGAR AND SWEETS IN 1980?

The major reason for sugar and sweets prices increasing nearly 25 percent in 1980 is that world production was short of consumption in both 1979/80 and 1980/81. While the 1980/81 world sugar crop is now estimated at around 87 million metric tons (Table 1) and almost 3 percent larger than the 1979/80 crop, it falls short of global sugar consumption, which is estimated at around 90 million tons. Thus, world sugar stocks are expected to fall about 3 million tons to around 21 million, following a drop of more than 5 million in 1979/80. The stocks-to-consumption ratio for 1980/81 is estimated at 23 percent -- the lowest since 1973/74 -- implying continued upward pressure on sugar prices.

Major factors in the current world situation are crop conditions in the Soviet Union and Cuba. The Soviet beet sugar crop had another bad year, mainly because of weather problems. Cold, wet weather delayed plantings, and as a result the late crop was damaged by frost at the other end of the growing cycle. Consequently, the Soviets will probably again have to import heavily or reduce consumption significantly. Normally, this

would merely mean increased imports from Cuba, but that country is also having production problems.

In Cuba, a rust disease struck the most widely planted sugar cane variety, while that country is in the midst of a campaign to expand acreage and production. This means additional pressure is put on other exporters throughout the world. The U.S. imports nearly half of the sugar used domestically, so world market conditions affect domestic prices, directly and quickly.

4. WHAT PART OF THE DOLLAR SPENT AT THE GROCERY STORE IS ACTUALLY SPENT FOR FOOD?

As shown in Figure 3, 69 percent of the grocery store dollar goes for food. Another 9 percent goes for beer, wine, liquor, soft drinks, candy and chewing gum. Non-food items account for the remaining 22 percent. Nearly 13 percent is for "other groceries" such as detergents, paper goods, cleaners, etc., and 9 percent goes for general merchandise like health and beauty aids. Individual shoppers can separate their food expenditures from grocery store spending by deducting the taxable items from the total bill.

5. WHO GETS THE CONSUMER'S FOOD DOLLAR?

This chart (Figure 4) represents total food expenditures of people in the U.S. of $330 billion in 1980, including food eaten at home and away from home. Of the total, only $89 billion, or 27 percent of the nation's annual food bill, was received by farmers. About 16 percent of the total food expenditures are for seafood and imported foods, including the marketing charges for these items. Marketing costs for U.S. farm produced foods amounted to about $188 billion in 1980 or over twice the amount received by U.S. farmers. Combined, the food marketing costs totaled $221 billion or

67 percent of the nation's food bill in 1980.

Retail food prices are affected by manufacturing and processing, transportation, and selling costs. The marketing bill has increased nearly 195 percent in the 13 years since 1967, due both to the cost of marketing a larger quantity of food and the increases in the per unit costs of marketing.

Direct labor costs increased more than 150 percent between 1967 and 1978 and account for the largest share (about one half) of the total increase in food marketing costs. Average hourly wage rates have more than doubled since 1967 in food processing, manufacturing, food stores, and eating establishments. Fringe benefits increased about 25 percent in just the last five years and now account for 30 percent of total labor costs. Labor productivity in the food marketing system has improved, but erratically. For example, productivity at the food retailing level has declined 6 percent in the past five years due to changing work rules, longer store hours, an increase in products requiring services (such as delicatessen items), and a slowdown of investment in labor saving technology.

Packaging and costs of transporting food products increased 133 percent from 1967 through 1978. Taxes, profits, advertising, fuel, interest, insurance, and other business costs increased by nearly 190 percent, thus placing additional upward pressure on food prices.

6. ARE GOVERNMENT PRICE SUPPORT PROGRAMS FOR FARMERS THE REASON FOR AT LEAST PART OF HIGHER GROCERY PRICES?

Many consumers feel farmers should not be paid for <u>not</u> growing grain. Today there is no program in effect that pays farmers for not producing. In recent years, market prices to producers have consistently exceeded

price supports for farm products. (Overhead 6) There is a farmer-held grain reserve program to store grain in years of large output and relatively low farm prices. The intent is to meet consumers' desires for stability and security in the supply of food. Reserves do reduce price risks to farmers. In 1980 and 1981, these grain reserves are being "pulled" from the reserve. This tempers even larger food price increases to consumers and keeps farm prices somewhat lower than otherwise. The prices that consumers pay for food products today reflect world market prices.

7. OVER A LONG PERIOD OF TIME, WHAT DIFFERENCE EXISTS IN FOOD PRICE INCREASES BETWEEN FOOD CATEGORIES?

The all food portion of the Consumer Price Index has increased 162 percent in the 13 year period from 1967 to late 1980 (See Table 2). Food prices have risen at an average annual rate in excess of 12 percent in this period. The general rate of inflation, as measured by the Consumer Price Index, has risen at just over 11 percent per year.

Just two of the 10 major food categories have had price increases above the average for all food items during the past 13 years (Table 2). Fish and sugar prices have increased 23 and 41 percent respectively more than the all food index.

Price increases in the 13 year period for meat, poultry, eggs, dairy products, fats and oils, processed fruits and vegetables and cereal and bakery products have been smaller than the increase in the all food price index. Fresh fruits and vegetables have increased at the same rate as for all food.

Long run variations in the increase in retail food prices reflect mainly: 1) changes in consumer preferences and consumers' ability to pay

for the products they desire; and 2) long run supply conditions that are influenced largely by improving technology and physical production limitations. Short run variations stem directly and indirectly from weather conditions in the U.S. and around the world and the biological nature of food production.

8. WHY IS THERE SO MUCH DIFFERENCE BETWEEN PRICE CHANGES FOR SEAFOOD AND POULTRY MEAT?

A dramatic contrast in food price variations over the longer term is provided by fish (seafood prices) and poultry meat. After sugar, fish was a leader in the increase in all food prices during the period since 1967. (Table 2) In the winter of 1980-81, adverse weather is reducing the seafood harvest substantially, resulting in a rapid escalation of seafood prices. This is a short time phenomena.

In 1977 U.S. fish harvest, at 5.2 billion pounds, was 28 percent above 1967 (Table 3). Rising prices provided an incentive to increase the fish harvest. As a result of a policy change, our fishing boundaries were extended to 200 miles offshore, thus reducing foreign fishing competition in U.S. waters. During this 11 year period the net value, after deducting for expanding exports of domestically harvested and processed fish, rose 142 percent.

A growing consumer preference for seafood was accompanied by improving incomes and is reflected in a 30 percent increase in per capita consumption during the 12 year period since 1967. To provide the additional fish required a threefold increase in the value of fish imports. The increase in our domestic fish harvest and more imports at higher prices indicates a strong shift in demand. Limitations in the physical capacity of our

fishing fleet and the limitations of the seas to supply seafood contributed to the price increase.

Near the other extreme, price increases for poultry meat products have trailed the all food price index by 20 percent even though the use of poultry meat per person has increased 29 percent in the 12 year period since 1967. Poultry production and marketing enterprises have experienced technological developments that have reduced costs and helped minimize retail poultry meat price increases.

9. WHAT KIND OF PRICE INCREASES FOR FOOD CAN CONSUMERS EXPECT IN 1981?

Figure 6 contains the U.S.D.A. projections for 1981 food prices. The Department of Agriculture is projecting prices for all foods will increase more than 12 percent in 1981. The biggest increases will be due to smaller supplies of pork, poultry and eggs, and less sugar, processed vegetables and vegetable oils. Cereal and bakery products may increase by 11 percent. Beef and veal prices are expected to go up 13.5 percent, while pork may rise by 25 percent, and poultry meat and eggs by 17 percent each. Dairy product prices will likely increase 11 percent and fruits and vegetables will go up 8 percent. Sugar and sweets will probably be 21 percent higher in 1981.

These estimates are, at best, minimum price increases for food in 1981. Higher inflation rates could alter the size of food price increases just as unexpected poor weather in 1981 could alter food output and thus prices. With significantly higher transportation and labor costs, the all food price index could be up as much as 15 percent.

Consumers can help control their personal food spending by practicing careful comparative shopping. Look for advertised specials and purchase

foods in plentiful supply. Boycotts and government imposed price controls will not help; instead they encourage larger increases at a later time.

10. HAS THE GRAIN EMBARGO IN 1980 ON U.S. GRAIN SHIPPED TO THE U.S.S.R. AFFECTED FOOD PRICES?

NO! The amount of grain exported actually increased in 1980 over 1979. Our corn and wheat exports in 1981 will increase over 1980. The grain embargo did not mean more grain stayed in the U.S. to be fed to livestock and poultry.

The amount of livestock and poultry products that will come to market in 1981 will decline substantially (Overhead 10). This is due to low profits in 1979-80. The biological process of animals has "locked in" the quantity of meat that will be available to consumers in 1981. Some government actions in 1980 were taken to place additional amounts of corn in the reserve program. This protected farmers immediately after the embargo from large price declines. With a short grain crop in 1980, the additional grain in the reserve program will restrain grain price increases and tend to protect consumers.

11. IN SUMMARY, WHY HAVE FOOD PRICES INCREASED?

There are generally five causes for food price increase. (Overhead 11) All factors, except weather, are directly related to inflation. Inflation is the underlying factor in food price increases.

1) Increases in farm production costs. These are reflected in higher commodity prices. Increased farm prices are passed through the processor, manufacturer, wholesaler and retailer to the consumer in the form of higher food prices.

2) Increased marketing costs. Marketing costs have increased 195 percent from 1967 to 1980. Food marketing costs include labor, transportation, processing and all other costs and are reflected in higher food prices.

3) Structural changes in the food industry. The possibility for concentration of market power in certain localities is greatly increased as the number of retailers declines. The government has a responsibility to monitor prices and generally will not allow market power to be too great in the food industry. This is not a serious problem with the food industry in most communities.

4) Food prices increase as incomes of consumers grow. Away from home eating now accounts for 31% of the food component of the Consumer Price Index. Also the type of foods purchased are affected. In 1977, 5.6 percent of the Consumer Food Price Index was in the form of snacks and condiments; in 1979 it had increased to 8.5 percent. As income increases, consumers buy more prepackaged and luxury food items. Despite much higher 1980 retail beef prices, Americans can purchase as much steak with one hour of work today as was purchased with one hour of work in 1969.

5) Weather conditions and the biological nature of food production.

These factors, too, affect food prices. Bad weather can cause crop failures which will result in higher prices in the food marketing system. We are seeing this in 1980 and 1981. The nature of the cattle cycle is such that when the cow herd is low, as in the early 1980's, consumers will pay higher prices for beef. The hog cycle in 1980 was in the plentiful stage for consumers with reasonable pork prices. However, hog producers went through a financial bind and are reducing the breeding herd. Pork prices will escalate in 1981 and 1982.

APPENDIX ESO-785

A Set of Visuals to Accompany

FOOD PRICE INFLATION

BY

Lois Hungate & Wallace Barr

Extension Economists

Department of Agricultural Economics &
Rural Sociology

Ohio State University

FIGURE 1

CONTRIBUTION TO INCREASES IN FOOD PRICES

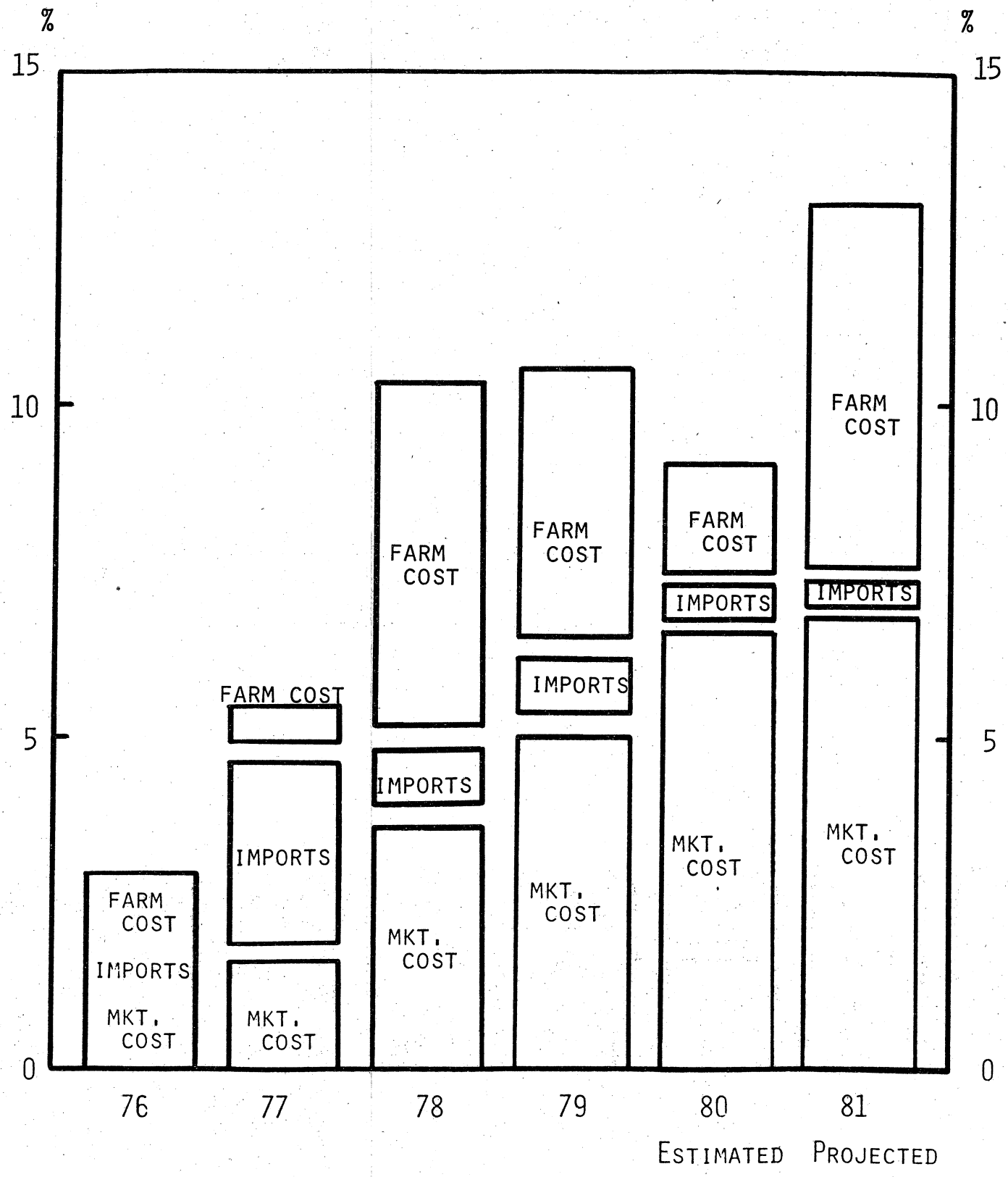


FIGURE 2

CHANGE IN C.P.I. FOR FOOD IN 1980

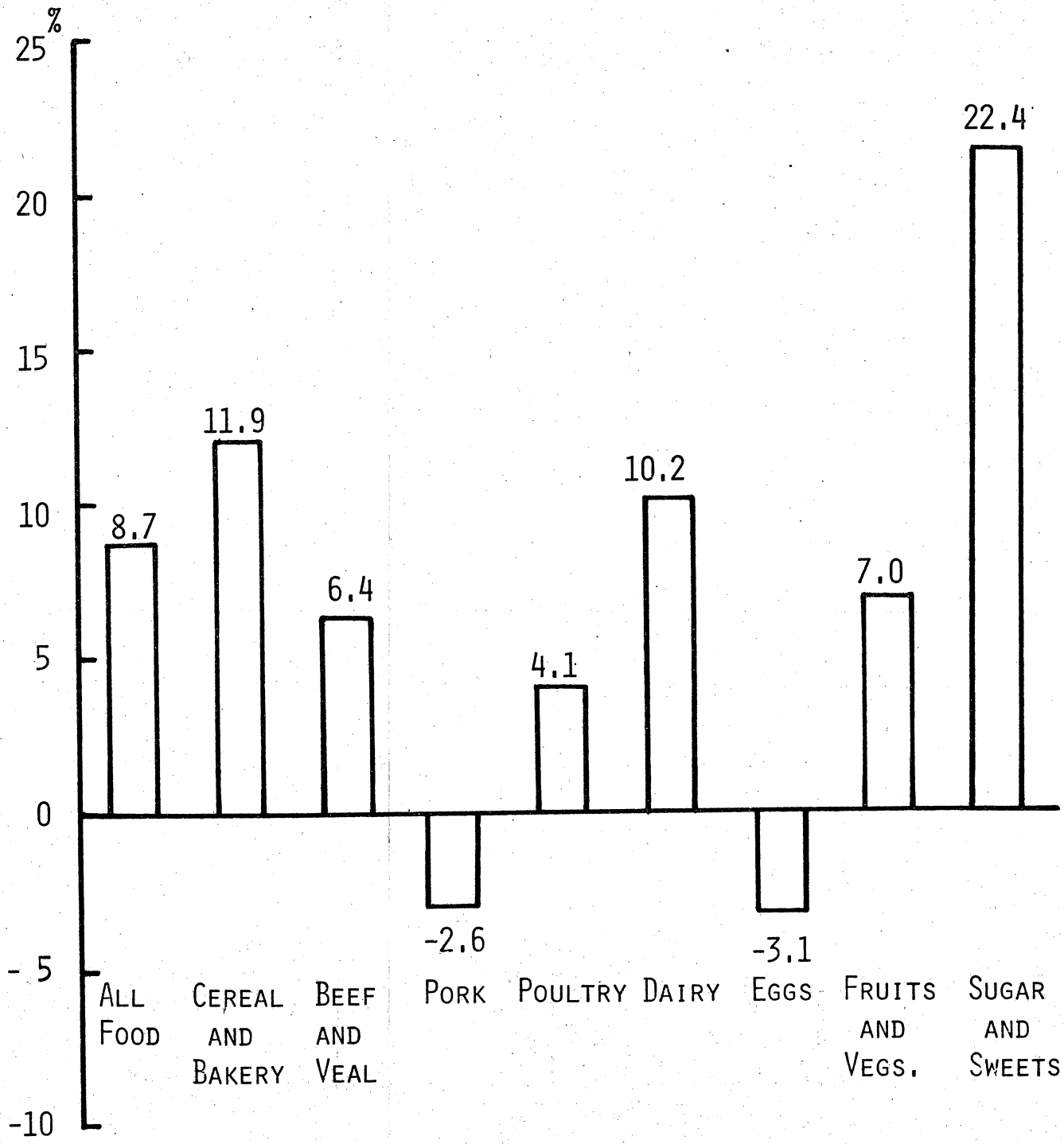


TABLE 1

WORLD SUGAR PRODUCTION 1976/77 - 1980/81*

	MILLION METRIC TONS				
	1976	1977	1978	1979	1980
NORTH AMERICA	18.8	19.2	19.7	17.7	17.9
SOUTH AMERICA	12.7	13.9	12.4	11.6	13.3
WESTERN EUROPE	13.2	14.6	14.6	14.8	14.5
EASTERN EUROPE	5.3	5.8	5.5	5.6	4.8
U.S.S.R.	7.3	8.8	9.3	7.8	7.0
AFRICA	6.1	6.1	6.3	6.5	6.3
ASIA	19.2	20.4	19.7	17.1	19.4
OCEANIA	3.7	3.7	3.3	3.5	3.8
TOTAL WORLD	86.3	92.4	91.0	84.6	87.1

* Crop Year September/August Basis.

FIGURE 3

DIVISION OF THE DOLLAR SPENT AT THE GROCERY STORE

$330 BILLION

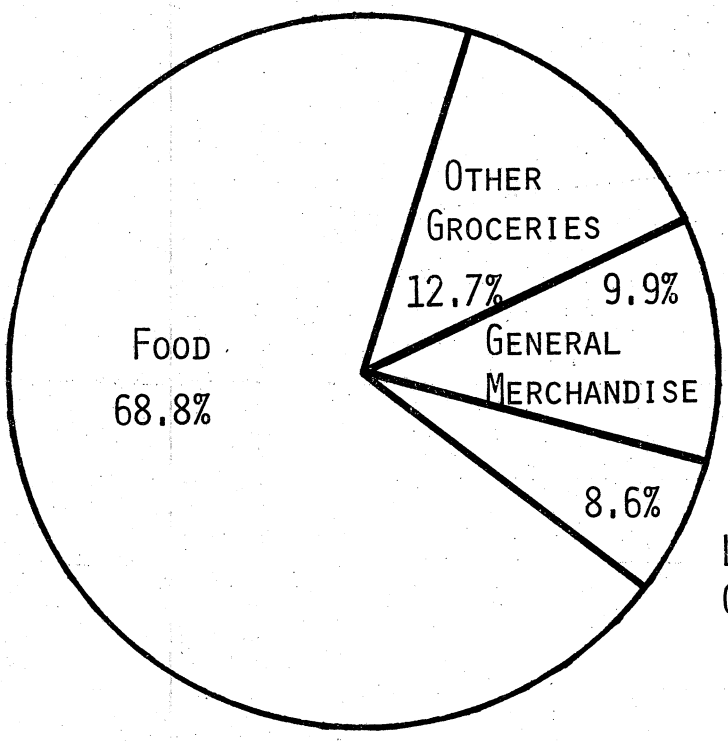


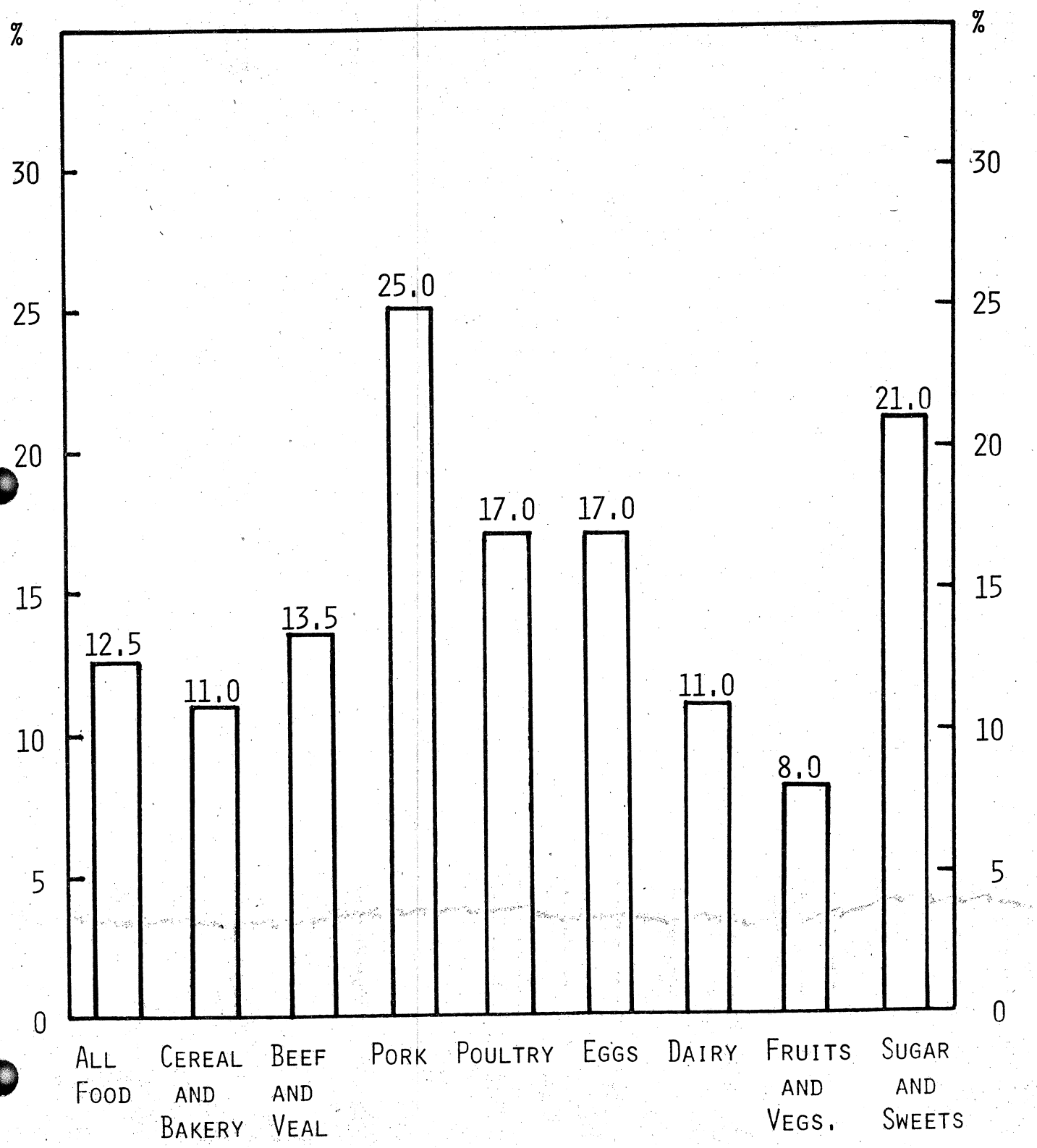
TABLE 3

DOMESTIC SEAFOOD CATCH AND VALUE OF EXPORTS, DOMESTIC CATCH AND FISH IMPORTS

YEAR	VALUE OF HARVESTED & PROCESSED FISH (SEAFOOD)			
	DOMESTIC CATCH	MINUS EXPORTS	NET DOMESTIC	FISH IMPORTS
	BIL. #	MIL. $	MIL. $	MIL. $
1967	4,055	67,524	522,375	538,301
1972	4,806	134,188	975,452	1,233,292
1977	5,198	473,375	1,264,627	2,078,492
1977/1967	128.2%	701.0%	242.1%	386.1%
1977/1972	108.2%	352.8%	129.6%	168.5%

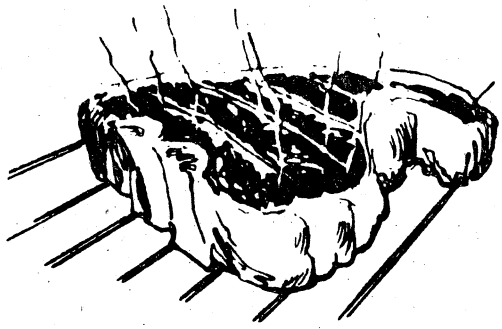
FIGURE 6

PROJECTED CHANGES IN C.P.I. FOR FOOD IN 1981



No. 10

THERE AIN'T NO MORE THIS YEAR!!



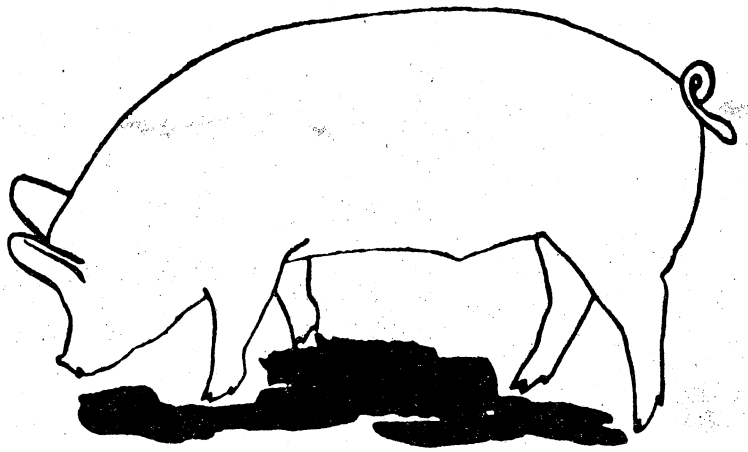


FIGURE 11

WHY FOOD PRICES INCREASED

-- INFLATION

HIGHER PRODUCTION COSTS

RISING MARKETING COSTS

MARKET MONOPOLY

RISING INCOMES

-- WEATHER

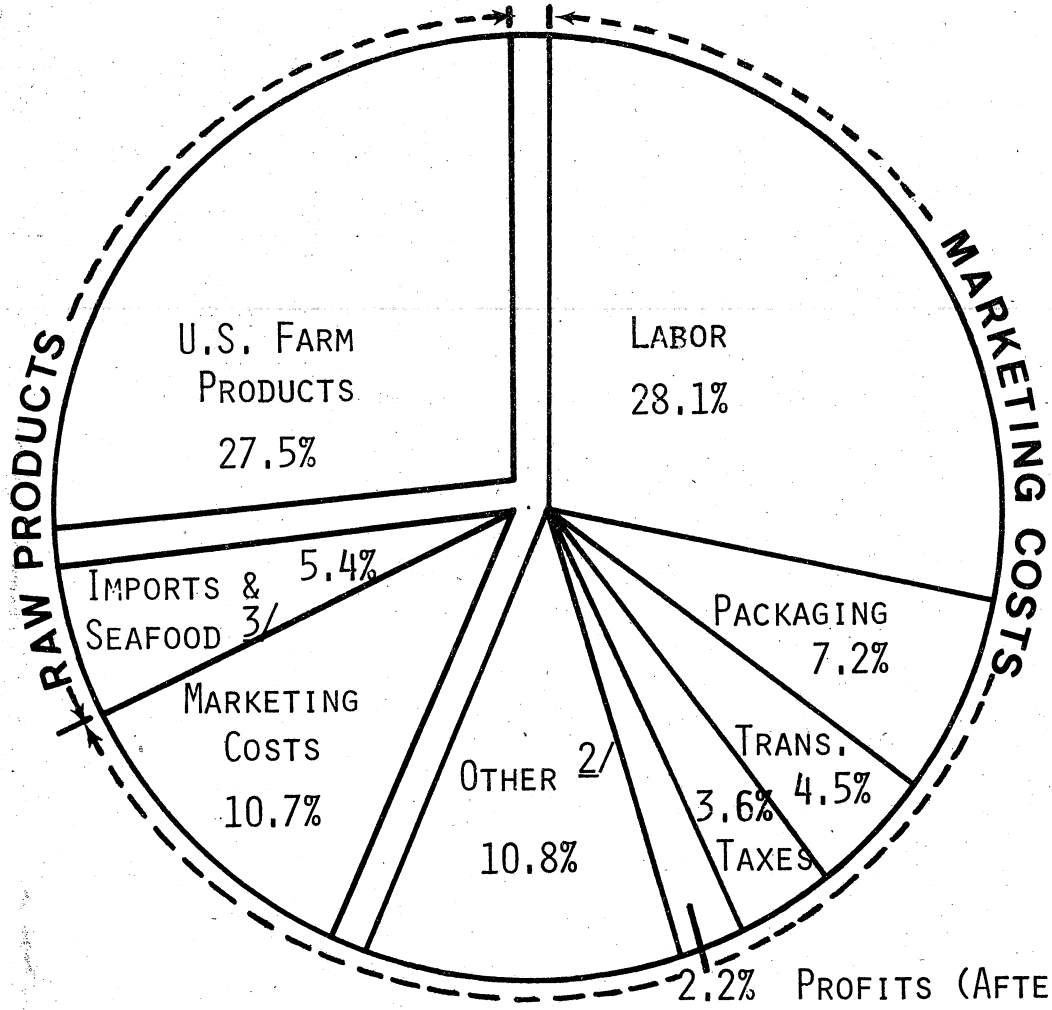
-- PRODUCTION CYCLE (BEEF)

(HOGS)

FIGURE 4

DISTRIBUTION OF U.S. FOOD EXPENDITURES, 1980

(TOTAL FOOD COSTS 1/: $330 BIL.)



1/ EXCLUDES ALCOHOLIC BEVERAGES BUT INCLUDES HOME AND AWAY FROM HOME FOOD COSTS.

2/ INCLUDES RENT, DEPRECIATION, INTEREST, PROMOTION, INSURANCE AND OTHER BUSINESS EXPENSES.

3/ TOTAL OF 16.1 PERCENT INCLUDES COST OF IMPORTED FOOD PRODUCTS, DOMESTIC SEAFOOD HARVEST AND MARKETING COSTS OF BOTH IMPORTS AND SEAFOOD.

FIGURE 5

PRICES ABOVE SUPPORT LEVEL

U.S. GOALS:

CONSUMERS - PRICE STABILITY AND

SECURE FOOD SUPPLY

FARMERS - REDUCED PRICE RISK

TABLE 2

FOOD PRICE INDEX AND RELATIVE PRICE CHANGES,

1967 TO LATE 1980

	FOOD INDEX (1967 = 100)	PERCENT CHANGE FROM ALL FOOD INDEX
ALL FOOD	262.4	xx
MEAT	258.7	-1.4
POULTRY	209.1	-20.3
FISH	336.6	+28.2
EGGS	175.3	-33.2
DAIRY PRODUCTS	232.7	-11.3
FATS & OILS	246.0	-6.3
FRUITS & VEGETABLES		
FRESH	262.3	0.0
PROCESSED	247.5	-5.7
CEREALS & BAKERY PRODUCTS	253.7	-3.3
SUGAR & SWEETS	369.0	+40.6